



## 2K05X Installation Manual

## XPON ONT 2GE with Wi-Fi Dual-Band

Rev 1.0

### 1.1 Product Description

Thanks for choosing the PPC Home Gateway Unit. All PPC terminal devices are designed for fulfilling FTTH and triple play service demand of fixed network operators or cable operators. These boxes are based on the mature GPON and Gigabit EPON technology, which have high ratio of performance to price, they are highly reliable and easy to maintain, with guaranteed QoS for different service. And they are fully compliant with GPON and EPON technical regulations such as ITU-T G.984.x, IEEE802.3ah and technical requirement of EPON Equipment. Dual mode PPC ONT can detect and exchange PON mode automatically.

### 1.2 Application Chart

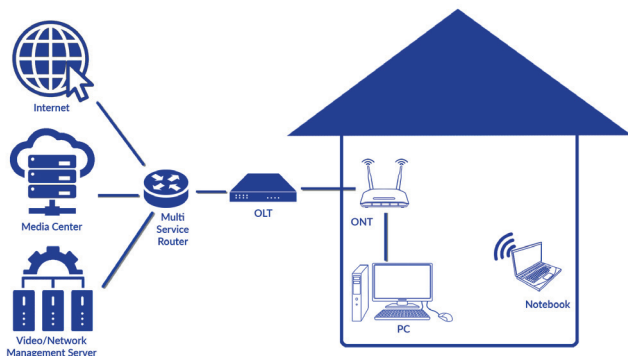


Fig 1 : Network Architecture



Fig 2 : 2K05X

### 1.3 Technical Parameters

| Technical items     | 2K05X(2GE with Wi-Fi Dual-Band) PPC ONT                                                                                   |
|---------------------|---------------------------------------------------------------------------------------------------------------------------|
| PON interface       | 1 GPON/EPON interface, SC single-mode/single-fiber.<br>GPON: uplink 1.25Gbps, downlink 2.5Gbps; EPON: symmetric 1.25Gbps. |
| Wavelength          | Tx 1310nm, Rx 1490nm                                                                                                      |
| Optical interface   | SC/APC                                                                                                                    |
| LAN interface       | 2x 10/100/1000Mbps auto adaptive Ethernet interfaces.10/100M Full/Half, 1000M Full Duplex, RJ45 connector.                |
| LED                 | 9, POWER, INTERNET, PON, LOS, LAN1, LAN2, 2.4G, 5G, USB                                                                   |
| Operating condition | Temperature: -5°C~55°C<br>Humidity: 10%~90% (non-condensing)                                                              |
| Storing condition   | Temperature :-30°C~60°C<br>Humidity :10%~90% (non-condensing)                                                             |
| Power supply        | DC 12V/1A                                                                                                                 |
| Power consumption   | ≤6W                                                                                                                       |
| Dimension           | 160mmx139.5mmx28.5mm(L×W×H)                                                                                               |
| Net weight          | 0.24Kg                                                                                                                    |

### 1.4 Package Contents

| Contents      | Quantity |
|---------------|----------|
| PPC ONT       | 1 pcs    |
| Power Adapter | 1 pcs    |
| User manual   | 1 pcs    |
| Cat 5E cable  | 1 pcs    |
| Warranty Card | 1 pcs    |

### 2.1 Installation Requirements

#### Installation Environment Requirements

PPC ONT equipment must be installed in the interior, and to ensure the following conditions:

- Confirmation at the PPC ONT installation at sufficient space to facilitate cooling machine.
- PPC ONT suitable operating temperature of  $-5^{\circ}\text{C} \sim 55^{\circ}\text{C}$ , humidity 10% to 90%.
- Device workplace should avoid radio transmitters, radar stations, and high-frequency interference from power equipment.

#### Equipment Installation

1. Installed on the desktop  
Place the machine on a clean bench, this installation is relatively simple, you can observe the following operation:
  - Ensure the smooth workbench.
  - Around the device enough space for heat dissipation.
2. Mounted on the wall
  - Observation PPC ONT equipment chassis two cruciform recess, in accordance with the position of the groove, installed two screws in the wall.
  - The original selected two mounting screws gently snap into recesses aligned.
  - Slowly let go, so that the device under the support of the screw hanging on the wall.

## 2.2 LED Indications

| LED                 | Panel Marking | Status | Description                                  |
|---------------------|---------------|--------|----------------------------------------------|
| Power               | POWER         | On     | The device is powered up.                    |
|                     |               | Off    | The device is powered down.                  |
| Optical signal loss | LOS           | Blink  | Device does not receive optical signals.     |
|                     |               | Off    | Device has received optical signal.          |
| Registration        | PON           | On     | The device is registered to PON system       |
|                     |               | Off    | Device is not registered to PON system       |
|                     |               | Blink  | Device registration is incorrect             |
| Interface           | LAN           | On     | Port is connected properly (LINK).           |
|                     |               | Off    | Port connection exception or not connected.  |
|                     |               | Blink  | Port is sending or/and receiving data (ACT). |
|                     | Wi-Fi         | On     | Wi-Fi is enabled                             |
|                     |               | Off    | Wi-Fi is disabled                            |



**Fig 4 : ONT Back Panel**

| Name  | Function                                                                       |
|-------|--------------------------------------------------------------------------------|
| PON   | Connect to OLT by SC type fiber connector, single mode optical fiber cable.    |
| LAN   | Connect PC or other devices with Ethernet port by Cat5 cable, RJ-45 connector. |
| POWER | Connect with power adapter. DC 12V, 1A.                                        |

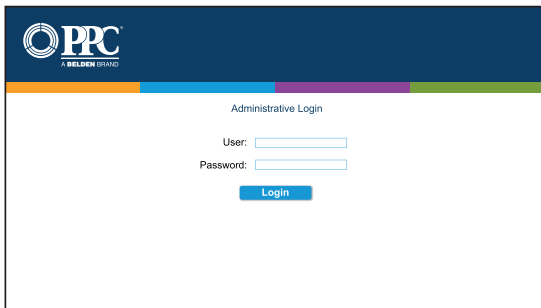
2LAN with Wi-Fi dual mode PPC ONT provides simple Web management function.

### 3.1 Default Configuration

The following is the default device configuration information.

- Local (LAN access) Username: admin , Password: PPC<last four digits of mac (in small letters)>
- LAN port management IP address: 192.168.101.1/24

### 3.2 Basic Configuration



The image shows a web browser interface for administrative login. At the top, there is a dark blue header with the PPC logo and 'A BELDEN BRAND' text. Below the header is a horizontal bar with four colored segments: orange, blue, purple, and green. The main content area is white and contains the text 'Administrative Login' centered. Below this text are two input fields: 'User:' followed by a text box, and 'Password:' followed by a text box. At the bottom of the input fields is a blue button labeled 'Login'.

**Fig 5 : Login Interface**

Web login default username: *admin* Password: *PPC<last Four Digits of MAC (Small letters)>*

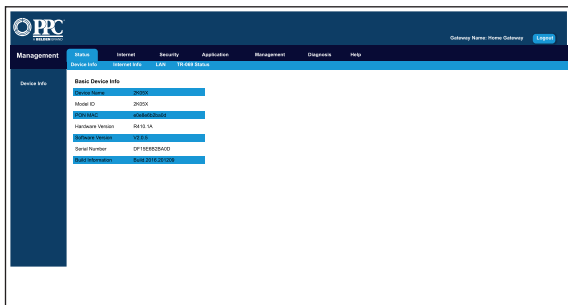


Fig 6 : Status

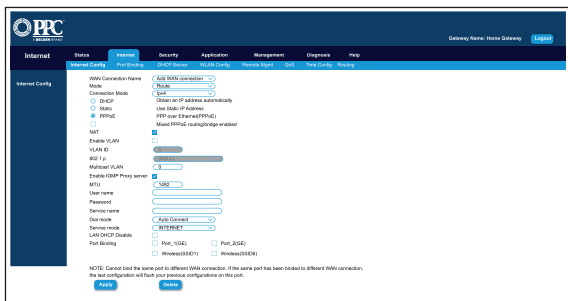
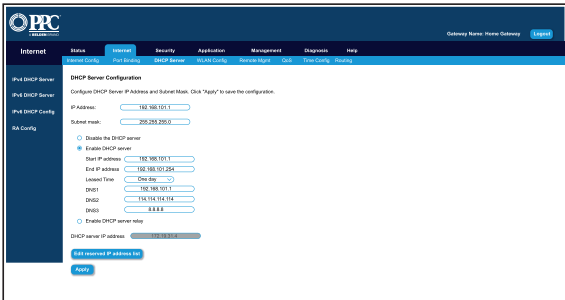


Fig 7 : WAN Connections

WAN connections will provide access to create/ delete/ modify the connections. From WAN connection list we can create a new WAN connection as per the requirements of the customer. All the details required for creating wan connection will be provided on the above web interface



The screenshot shows the 'DHCP Server Configuration' page. The left sidebar has 'Internet' selected, with 'DHCP Server' highlighted under the 'Internet' tab. The main content area is titled 'DHCP Server Configuration' and includes instructions: 'Configure DHCP Server IP Address and Subnet Mask. Click "Apply" to save the configuration.' The form contains the following fields and options:

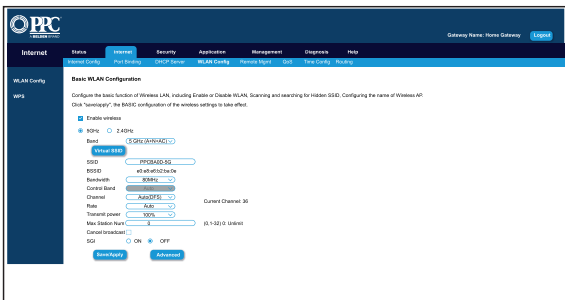
- IP Address:** 192.168.101.1
- Subnet mask:** 255.255.255.0
- Options:**
  - ☐ Disable the DHCP server
  - ☒ Enable DHCP server
- Start IP address:** 192.168.101.1
- End IP address:** 192.168.101.254
- Leased Time:** One day
- DNS1:** 192.168.101.1
- DNS2:** 192.168.101.1
- DNS3:** 8.8.8.8
- ☐ Enable DHCP server relay
- DHCP server IP address:** 192.168.101.1
- Buttons:** 'Save/Apply' and 'Apply'.

**Fig 8 : LAN setting**

**IP Address and Subnet Mask:** LAN port IP address and Mask.

**DHCP option:** Enable or disable DHCP server and configure IP address pool, DNS, etc.

**Note:** DHCP server changes take effect after the device is restarted.



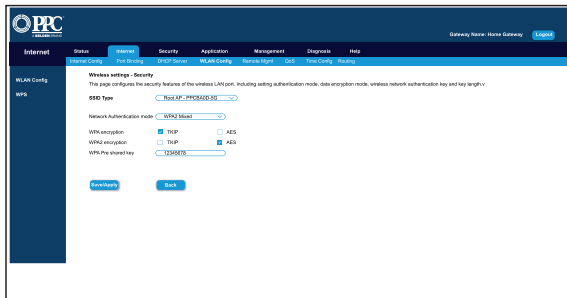
The screenshot shows the 'Basic WLAN Configuration' page. The left sidebar has 'Internet' selected, with 'WLAN Config' highlighted under the 'Internet' tab. The main content area is titled 'Basic WLAN Configuration' and includes instructions: 'Configure the basic function of Wireless LAN, including Enable or Disable WLAN, Scanning and searching for Hidden SSID. Configuring the name of Wireless AP. Click "Save/Apply" to save the configuration of the wireless settings to take effect.' The form contains the following fields and options:

- Options:**
  - ☐ Enable wireless
  - ☒ 5GHz
  - ☐ 2.4GHz
- Band:** 5 GHz (2.4GHz)
- SSID:** PP05R450 SS
- BSSID:** e1-e1-e1-e1-e1-e1
- Bandwidth:** 80MHz
- Control Band:** AutoDFS
- Rate:** Auto
- Transmit power:** 100%
- Wlan Station Name:** (A-Z 0-9) (0-128)
- Channel:** 35
- Channel broadcast:** ☐
- SGI:** ☐ ON ☒ OFF
- Buttons:** 'Save/Apply' and 'Advanced'.

**Fig 9 : WLAN Configuration**

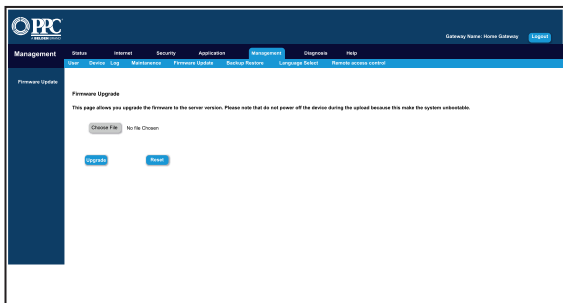
WLAN Basic Configuration helps us to select the wireless band (2.5 GHz & 5GHz) and also can change the parameters as per the requirement.





**Fig 10 : WLAN Security Setting**

WLAN Security Settings helps us to configure the Wi-Fi key encryption and authentication mode of the selected SSID.



**Fig 11 : Firmware Upgradation**

The above web page will helps us to do upgrade the software/firmware of ONT

**Warranty term & conditions:**

<https://www.ppc-online.com/hubfs/Legal Policies/actives-product-warranty.pdf>

**End of life policy:**

<https://www.ppc-online.com/hubfs/Legal Policies/actives-end-of-life-policy.pdf>

**Service level agreement:**

<https://www.ppc-online.com/hubfs/Legal Policies/actives-service-level-agreement.pdf>